

REMARKS

Claims 1-12 are pending in this application. The Office Action rejects claims 1-6 under 35 U.S.C. §102(b); and rejects claims 7-12 under 35 U.S.C. §103(a). Applicant hereby traverses the rejections.

I. Claim Rejections Under 35 U.S.C. §102(b)

The Office Action rejects claims 1-6 under 35 U.S.C. §102(b) as anticipated by Nawa et al. (US 5,863,850) in view of Sherif (US 5,023,071). The Office Action asserts that Nawa teaches each claimed feature except for "the aqueous phase emulsified in the organic phase with a surfactant," and "organic phase having dissolved therein a zirconium alkoxide, wherein conducting said organic phase with said aqueous phase to produce a product for the zirconium hydroxide by hydrolysis reaction of zirconium alkoxide at their interface between said organic and aqueous phases while incorporating the zirconium element in the product." It would thus allegedly have been obvious to an ordinarily skilled artisan at the time the Applicant's invention was made to provide adding a surfactant to a solution comprising metal alkoxide for the purpose of forming an emulsion in a substantially similar process of forming metal oxides from corresponding metal alkoxides by a hydrolysis reaction as taught by Sherif. Additionally, the Office Action asserts that it would allegedly have been obvious to an ordinarily skilled artisan at the time of the invention to substitute zirconium alkoxide with titanium alkoxide as taught by Sherif. Applicant respectfully traverses the rejection.

Applicant respectfully notes that the Office Action rejects claims 1-6 as anticipated by, and not as obvious over the cited references. Because the captioned headings and language of the Office Action appears to indicate a rejection based on obviousness, Applicant will reply as though this were an obviousness rejection under 35 U.S.C. §103(a).

Instant claim 1 recites "contacting an organic phase having dissolved therein an organic compound which produces a hydroxide of a first element when hydrolyzed, with an

aqueous phase containing a second element as *an ion ...*" Thus, when the organic phase and aqueous phase contact each other, the organic metal compound in the organic phase contacts with water, causing a hydrolysis reaction that produces hydroxide or oxide of the first metal. Then, the metal ions in the aqueous phase are incorporated into the hydroxide or oxide of the first metal produced from hydrolysis. This feature is new in the art. One advantage of this feature is that the resultant first metal element and second or additional metal elements become highly homogeneously diffused. This feature is particularly advantageous as the number of metal alkoxides increases.

In contrast, additional metal elements as present as ions only in the organic phase in conventional alkoxide methods. Nawa, for example, discloses various conventional methods of making ceramic material. However, none of the methods of Nawa involve hydrolysable organic metal compound in the organic phase contacting a second metal element present as an ion in the aqueous phase. Nor does Nawa anywhere teach or suggest that an organic compound should be provided in the organic phase and a second metal element should be provided as an ion in the aqueous phase, much less that such an arrangement would provide a system where the first and second metal elements are diffused in a highly homogeneous manner.

Sherif does not remedy this deficiency. Sherif is only relied upon to teach that it would have been obvious to use zirconium alkoxide instead of titanium alkoxide. It would thus not have been possible to obtain the claimed features by looking from Nawa to Sherif.

For at least the foregoing reasons, claims 1-6 would not have been obvious over Nawa in view of Sherif. Reconsideration and withdrawal of the rejection are respectfully requested.

II. Claim Rejections Under 35 U.S.C. §103(a)

The Office Action rejects claims 7-12 under 35 U.S.C. §103(a) as unpatentable over Nawa in view of Sherif and Uenishi et al. (US 2002/0061816). The Office Action asserts that the combination of Nawa and Sherif teach each claimed feature except for "an exhaust gas purification catalyst carrier by a production process" which is taught by Uenishi. It would thus have allegedly been obvious to an ordinarily skilled artisan at the time of the invention to provide mixed oxide comprising zirconium and cerium as used as catalysts as taught by Uenishi. Applicant respectfully traverses this rejection.

For the reasons discussed above, instant claim 1 is patentable over Nawa in view of Sherif. Because Uenishi does not remedy the deficiencies of either Nawa or Sherif, this rejection is also overcome.

For at least the foregoing reasons, claims 7-12 are not unpatentable over Nawa in view of Sherif and Uenishi. Reconsideration and withdrawal of the rejection are earnestly solicited.

III. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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